SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name	Isoamyl Alcohol
CAS number	123-51-3
Synonyms	Isoamyl alcohol, isopentyl alcohol

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses	Laboratory chemicals

1.3 Details of the supplier of the safety data sheet

Company	Lab Alley, LLC 12501 Pauls Valley Road Austin, Texas 78737 U.S.A.
Telephone	512-668-9918
Fax	512-886-4008

1.4 Emergency telephone

Emergency Phone #	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids	Category 3
Acute Inhalation Toxicty - Vapors	Category 4
Skin Corrosion/irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Target Organs - Respiratory system.	

2.2 GHS Label elements, including precautionary statements

Pictogram	
Signal Word	Warning
Hazard statements	Flammable liquid and vapor. Harmful if inhaled. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.
Precautionary statements:	
Prevention	Use only outdoors or in a well-ventilated area. Wash face, hands and any exposed skin thoroughlt after handling. Wear protective gloves/protective clothing/eye protection/face protection. Do not breath dust/fume/gas/mist/vapors/spray. Keep away from heat/sparks/open flames/hot surfaces. No Smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precuationary measures against static discharge. Keep cool.
Response	Get medical attention/advice if you feel unwell.
Inhalation	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctore/physician if you feel unwell.
Skin	If skin irritation occurs: Get medical advice/attention. IF ON SKIN (or hair): Take off imediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.
Eyes	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Fire	In case of fire: Use CO2, dry chemical, or foam for extinction.
Storage	Store in a well-ventilated place. Keep container tightly closed. Store locked up.
Disposal	Dispose of contents/container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Repeated exposure may cause skin dryness or cracking.

SECTION 3: Composition/information on ingredients

3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Isoamyl alcohol	isopentyl alcohol	123-51-3	98.5%

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

If inhaled	Move to fresh air. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the air of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Obtain medical attention. If not breathing, give artifical respiration.
In case of skin contact	Wash off immediately with plenty of water for at least 15 minutes. Obtain medical attention.
In case of eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
If swallowed	Do not induce vomiting. Obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Breathing difficulties. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Cool closed containers exposed to fire with water spray.
Unsuitable extinguishing media	No information available

5.2 Specific hazards arising from the substance or mixture

Flammable. Risk of ignition. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Containers may explode when heated. Thermal decompostion can lead to release of irritating gases and vapors. Hazardous combustion products include: carbon monoxide and carbon dioxide.

5.3 Special protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

5.4 Further information

Flash Point	45 °C / 113 °F
Autoignition Temperature	365 °C / 689 °F

Explosion limits

Upper	8.0 vol%
Lower	1.2 vol%
Sensitivity to Mechanical Impact	No information available
Sensitivity to Static Discharge	No information available

NFPA

Health	Flammability	Instability	Physical hazards
2	2	0	N/A

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Ensure adequate ventilation. Remove all sources of igntion. Take precautionary measures against static discharges.

6.2 Environmental precautions

Should not be released into the environment. See Section 12 for additional ecological information.

6.3 Methods and materials for containment and cleaning up

Remove all sources of ignition. Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Use spark-proof tools and explosion-proof equipment.

6.4 Reference to other sections

See section 2 for full list of hazard and precaution statements.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Precautions on safe handling

Use only under a chemical fume hood. Wear personal protective equipment. Do not get in eyes, on skin or on clothing. Do not breathe vapors or spray mist. Do not ingest. Keep away from open flames, hot surfaces and sources of igntion. Use spark-proof tools and explosion-proof equipment. Take precautionary measures against static discharges. Use only non-sparking tools.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition. Flammables area.

Incompatibilities
No information available

SECTION 8: Exposure controls/personal protection

8.1 Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Component	Type	Value	
Isoamyl alcohol	(Vacated) TWA	100 ppm	360 mg/m3
	(Vacated) STEL	125 ppm	450 mg/m3
	TWA	100 ppm	360 mg/m3

US. ACGIH Threshold Limit Values

Component	Type	Value
Isoamyl alcohol	TWA	100 ppm
	STEL	125 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Component	Type	Value	
Isoamyl alcohol	IDLH	500 ppm	
	TWA	100 ppm	360 mg/m3
	STEL	125 ppm	450 mg/m3

Biological occupational exposure limits
No information available

8.2 Exposure controls

Appropriate engineering controls
Use only under a chemical fume hood. Use explosion-proof electrical/ventilated/lighting/equipment. Ensure that eyewash stations and safety showers are closed to the workstation location. Ensure adequate venilation, espicially in confined areas.

Personal protective equipment

Eye/face protection
Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. Tightly fitting safety goggles. Face shield.

Skin and body protection
Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Control of environmental exposure
No information available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Liquid
Appearance	Clear
Odor	Characteristic
Odor Threshold	No information available
pH	6.5-25 g/l aq.sol
Melting Point/Range	-117 °C / -178.6 °F
Boiling Point/Range	130 - 132 °C / 266 - 269.6 °F 760 mmHg
Evaporation Rate	No information available
Flammability (solid)	No information available
Flammability or explosive limit	
Upper	8.0 vol%
Lower	1.2 vol%
Vapor Pressure	4 hPa @ 20 °C
Vapor Density	3.04 (Air = 1.0)
Density	0.807-0.811
Solubility	miscible
Partition coefficient; n-octanol/water	No data available
Autoignition Temp	365 °C / 689 °F
Decomposition Temp	335 °C
Viscosity	4.3 mPa s at 20 °C
Molecular Formula	C5H12O
Molecular Weight	88.15
VOC Content(%)	No information available
Oxidizing properties	No information available

9.2 Other safety information
No information available

SECTION 10: Stability and reactivity

10.1 Reactivity
None known, based on information available.

10.2 Chemical stability
Stable under normal conditions.

10.3 Possibility of hazardous reactions

Incompatible products. Excess heat. Keep away from open flames, hot surfaces and sources of ignition.

10.4 Conditions to avoid

Incompatible products. Excess heat. Keep away from open flames, hot surfaces and sources of ignition.

10.5 Incompatible materials

Strong oxidizing agents, metals, alkali metals, halogens, acids, acid anhydrides, acid chlorides, isocyanates.

10.6 Hazardous decomposition products

Carbon monoxide, carbon dioxide

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Isoamyl alcohol	1300 mg/kg (rat)	3250 mg/kg (rabbit)	-
	-	3970 µL/kg (rabbit)	-

Skin corrosion/irritation

No information available

Serious eye damage/eye irritation

Irritating to eyes

Respiratory or skin sensitization

Irritating to respiratory system

Germ cell mutagenicity

No information available

Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Isoamyl alcohol	123-51-3	Not listed	Not listed	Not listed	Not listed	Not listed

Specific target organ toxicity - single exposure

Respiratory system

Specific target organ toxicity - repeated exposure

None known

Reproductive toxicity
No information available

Chronic effects
No information available

11.2 Additional Information
No information available

SECTION 12: Ecological information

12.1 Toxicity

Product		Species	Test Results
Isoamyl alcohol	EC50	Desmodesmus subspicatus	493 mg/L 72 h
	EC50	Desmodesmus subspicatus	181 mg/L 96 h
	LC50	Rainbow trout	700 mg/L 96 h
	EC50	Microtox	2500 mg/L 17h
	EC50	Daphnia magna (water flea)	260 mg/L 48 h

12.2 Persistence and degradability
Soluble in water. Persistence is unlikely due to the information available

12.3 Bio accumulative potential
No information avialable

12.4 Mobility in soil
Will likely be mobile in the environment due to its water solubility.
log Pow = 1.28

12.5 Results of PBT and vPvB assessment
No information available

12.6 Endocrine disrupting properties
No information available

12.7 Other adverse effects
Tumorigenic effects have been reported in experimental animals.

SECTION 13: Disposal considerations

13.1 Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

SECTION 14: Transport information

DOT (US)

UN-No	UN1105
Proper Shipping Name	PENTANOLS
Hazard Class	3
Packing Group	III

IMDG

UN-No	UN1105
Proper Shipping Name	PENTANOLS
Hazard Class	3
Packing Group	III

IATA

UN-No	UN1105
Proper Shipping Name	PENTANOLS
Hazard Class	3
Packing Group	III

SECTION 15: Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not listed

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed

SARA 304 Emergency release notification

Not listed

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

See section 2 for more information

SARA 313 (TRI reporting)

Not listed

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not listed

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not listed

Safe Drinking Water Act
Not listed

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace
Not listed

US state regulations

US. Massachusetts RTK - Substance List
Listed

US. New Jersey Worker and Community Right-to-Know Act
Listed

US. Pennsylvania Worker and Community Right-to-Know Law
Listed

California Proposition 65
Not listed

SECTION 16: Other information

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Revision 1: 10/18/2020
Revision 2: 07/19/2024
Revision 3: 07/03/2025

SECTION 17: Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.